Comprehensive Tolling Study: Work Plan

Tasks 1, 2, and 12 – Policy Analysis and Identification of Tolling Opportunities and Corridors

The objective of this group of tasks is to explore policy options and frameworks around which Washington State may build future tolling systems. We will also identify and screen potential tolling opportunities within Washington. Charging a toll for the use of a highway now comes in many "flavors," designed to achieve potentially conflicting policy objectives. Traditionally, tolls have been used as a means of funding expensive infrastructure projects that provide benefits over many years. The concept of using "pricing" to manage traffic has become a reality over the last few years, but such "priced" projects do not always have the same level of financial reward as a traditional toll project.

Given the pace of this study, it will be important to develop an early, common understanding of the Commission's goals when advancing pricing projects. To help this, we will bring the perspective of experience elsewhere in the United States, and relate it to Washington State's objectives.

We will then develop a set of screening criteria and mechanisms to quickly assemble a list of projects and systems of projects that can be studied in more detail. These projects will include, at a minimum, the Alaskan Way Viaduct, SR 520 Floating Bridge, I-405 Managed Lanes, and the SR 704 Cross Base Highway. We also will consider pricing projects on I-5, SR 16, SR 167, and I-90, as well as regional pricing projects such as mileage-based pricing, congestion (value) pricing, and HOT lanes.

The CS team has the staff, expertise, and tools to carry out the screening. Both TTI and PBS&J have developed project screening tools that are used in Texas to evaluate the financials of potential tolling projects in their early stages. However, financial feasibility will not be the only objective – traffic management objectives also will be important. Evaluation measures dealing with the ability to achieve congestion reduction should be considered.

We will work with the Washington State Transportation Commission (Commission) and the Washington State Department of Transportation (WSDOT) to develop the most appropriate approach to identifying projects. While starting with a blank-slate is possible, we believe there is already a list of projects that are being considered for tolling. The RFP mentions a process that shall, "include a mechanism so that suggestions of legislators, local officials, transportation organizations, and members of the public can contribute potential toll ideas to the analysis." We strongly agree that these are vital elements to a successful program, and the CS team has the capabilities to conduct an effective outreach effort. The aggressive schedule may dictate the type or timing of outreach. We would like to give the public and stakeholders a meaningful way to contribute project ideas but need to be cognizant of the schedule and resources. Therefore, we propose a focused outreach effort among key stakeholders to identify candidate projects for screening. We also encourage a dialogue with the Commission and WSDOT to develop an outreach plan from the perspective of schedule, dollars, and effectiveness.

In addition to identifying specific projects and systems for evaluation, this task will synthesize the issues that have been percolating for several years in Washington over the issue of tolling into an analysis of policy options. We will build upon early goal-setting discussions with the Commission, WSDOT staff, as well as the executive interviews to craft potential policy directions.

Task 1 – Policy Analysis

This task lays the groundwork for the entire study. It provides an opportunity for the consultant team to confirm with the Commission and WSDOT the objectives of the study and develop policy options and frameworks so that Washington State can develop strategies to implement tolls over the long run, providing stability of direction as technology and other conditions change. We will start by relating the objectives of tolling in Washington to national experience and trends. What are

different "business models" or "policy models?" How is the world changing? What are the tradeoffs among different approaches?

The work in this task will be influenced by the analysis and outcomes of all the other tasks. For example, lessons learned in the Tacoma Narrows Bridge analysis will have a direct bearing on the question of the State's future role in various tolling projects. Similarly, technological and social equity considerations will also influence potential transportation policies.

Specific work efforts will be:

- Executive interviews of up to 20 individuals (or groups of individuals) to identify policy issues and concerns and specific suggestions for projects or systems statewide. We anticipate that some of these interviews would be done in conjunction with the September 19 Commission meeting. Most of the interviews would be done by phone, with about 25 percent anticipated to be done in person.

- Preparation of an early working paper on goals and objectives of tolling in Washington based upon discussions with the Commission, WSDOT staff, the executive interviews, and perspective from current developments around the country. This material will be presented to the Commission at the October 18 workshop.

- Analysis of policy issues that emerge from the early working paper, and the other tasks of this project. In particular, issues explored in Task 12: Tacoma Narrows Bridge will provide insight into statewide policy discussions. The aim of the analysis will be to quide the Commission and WSDOT toward a process that facilitates the State's ability to make policy level decisions on if, where, when and how to toll.

- Preparation of a working paper to contribute to the interim report.

- Further analysis of policy considerations after feedback on the interim report, leading to the preparation of a working paper to contribute to the final report.

Task 2 – Identification of Toll Corridors, Projects, Integrated Facilities, and Systems

The purpose of this task is to identify potential corridors, projects, integrated facilities and systems in Washington, develop a screening mechanism to determine which of these projects should be evaluated further in this study, and apply the screening mechanism. Specific work elements are:

- Work with WSDOT staff to refine the list of candidate projects and systems of projects. We anticipate this list to come from the Commission, WSDOT staff, as well as the executive interviews in Task 1. These projects will include, at a minimum, the Alaskan Way Viaduct, SR 520 Floating Bridge, I-405 Managed Lanes, and the SR 704 Cross Base Highway.

- Organize the projects into the following hierarchy:

    - Potential strategies and tools.

    - Identify and categorize potential projects (or systems) into like types. Projects may fit into multiple categories.

    - Identify illustrative examples of each project (or system) type to study for the Interim Report.

    - Hold the remainder of the projects/systems for the Final Report.

- Based on the goal-setting efforts in Task 1, develop a focused set of screening criteria from which to determine whether projects should be evaluated further in this study. Review and refine this list with the Commission and WSDOT staff. We will present the list and criteria to the Commission at the October 18 meeting, and carry out the screening after that meeting.

- Carry out the screening.

- Develop an evaluation mechanism to use in conjunction with the more detailed analysis to be done in Tasks 3-6. We will coordinate the performance measures with ongoing work for the Congestion Relief Analysis (CRA) project.
- Develop a mockup of how the detailed analysis will be presented for presentation at the October Commission meeting.
- Prepare a technical memorandum to contribute to the interim report.

A note on the timing of this task. We propose to develop the project list and screening mechanism in time for the October 18 Commission Workshop. We also propose to move forward with detailed analysis of projects or systems of projects starting in early October. We anticipate that there are projects already in the project development pipeline that could be advanced to more detailed analysis without undue risk of being screened out before October 18.

Task 12 – Tacoma Narrows Bridge Analysis

The legislature stipulated that:

> (a) The study must include an analysis of the only currently-authorized toll facility, the Tacoma Narrows bridge project. The study findings must include
> (i) the development of more uniform and equitable policies regarding the distribution of financial obligations imposed on those paying the tolls on the Tacoma Narrows bridge, and
> (ii) opportunities and options for reducing the outstanding indebtedness on the bridge project, including the possibility of buy-downs and other means of spreading the cost of the project more equitably.

The following work efforts will be done:

- Prepare memorandum of definition and methodology for distribution and comment to make sure we are adequately and accurately addressing the task. The memo would:
  - Definition of the terms and the mission of the analysis. In particular, the words equity and uniformity.
  - Describe a few alternative scenarios that we will investigate as options. These might include equity/uniformity as related to social issues uniformity across geographic areas.
  - Describe our methodology for analyzing those options. We anticipated that this methodology would involve a matrix that showed:
    - The Policy
    - Quantification of facts, if available or appropriate
    - Operating and practical means of carrying out the policy
    - Problems or issues in carrying out the policy.
- Carry out the analysis based on feedback received, with the intent of having some progress for the October workshop.
- Develop a technical memorandum of findings to contribute to the draft Interim Report.
- Refine analysis to contribute to the final Interim Report

Tasks 3-6 – Traffic and Fiscal Analysis

The objective of this group of tasks is to evaluate the effectiveness of different pricing and tolling options from the perspective of transportation and fiscal effectiveness. The CS team will work with the Commission and WSDOT staff to identify the most important performance measures. We anticipate that the Commission and WSDOT will want to know the answer to these questions:

- What are the policy objectives for each project? Financing, traffic management, both?
- What type of tolling or pricing is appropriate for each project? Flat rates, time-of-day priced, HOT lanes, express toll lanes, all lanes?
- What are the costs to construct and operate?
- What range of revenue could be expected?
- What portion of the capital costs can be recovered by user fees, and how reliable are those estimates likely to be?
- How does tolling change transportation performance on the targeted facility and on the system as a whole?

The most challenging aspect of this set of tasks will be developing traffic forecasts that provide a reliable basis for decision-making within the timeframe allotted for the study. Although this is not to be an "investment grade" study, the Commission and WSDOT staff must make some important decisions on the basis of this work.

Traffic and revenue forecasts are challenging because they must anticipate the behavior of millions of people, consider the uncertainty of future economic conditions, and take account of policy actions by many government agencies. Numerous traffic and revenue forecasts have been off the mark in recent years. Under the CRA project, CS is actively working to develop better methods of analyzing tolling projects and explain the risks and uncertainties inherent in toll road traffic and revenue forecasts. The most important thing about traffic and revenue studies – even if they are not investment grade – is that they be reasonable, conservative, transparent, and supported by the analysis. Regardless of the outcome, it is important that the Commission and WSDOT understand the assumptions that go into an analysis and the limitations of that analysis.

Traditionally, analyses to support the development of tolling projects focused on one factor – revenue generation. Since tolling is now being asked to accomplish traffic management goals, the analysis needs include the impact on traffic flow – both on and off the target facility.

CS and Mirai currently are in the process of improving the travel demand model for the Puget Sound region to be appropriately sensitive to pricing changes. The model incorporates sophisticated techniques that allow travelers to choose not only their destination and mode, but also whether they will shift time of travel in reaction to congestion or toll prices. This is a robust tool for this purpose and was developed with the intent of being used on tolling studies such as this one. We have just turned the model over to WSDOT to test for use on pricing projects. We will continue to work with WSDOT to ensure that the first applications of the model provide reasonable results, recognizing that this may require additional adjustments to the model. Parts of the model improvements were based on research that CS conducted for the Federal Highway Administration (FHWA) and this is the first application of this research in the country (except for the case study conducted in Denver).

We also will need to consider tolling opportunities beyond the Puget Sound region. Tolling projects are being discussed in Vancouver, and others may be under discussion. We will need to be prepared to study tolling in those regions on a "level playing field" with those in Puget Sound. This raises a methodological challenge, since the basis of analysis will be different across the projects and there will be neither the time nor the resources in this study to simultaneously modify models in three regions.

To address this issue, we propose to make use of traffic forecasts in the regional models now available in Vancouver and apply toll elasticity factors derived from the PSRC model runs. Sketch

planning techniques may also be used in other regions. The PSRC projects will serve as illustrative examples for the types of diversion and traffic impacts that could be expected for similar projects. For example, lessons learned in the analysis of the SR 520 and I-90 bridges in the Puget Sound region might be transferable to the Columbia River bridges in the Vancouver region. We also will build on the pricing analysis completed during the CRA project (Phase 1) that examined a regional pricing system and freeway-based pricing effects in the Vancouver region.

Although the PSRC model is a robust tool for evaluating pricing, there are still aspects of pricing that cannot be adequately captured by a regional tool. One of the most effective traffic management tools now available is dynamic pricing, where prices change frequently (i.e., every three or six minutes) based on real-time traffic conditions. Such real-time traffic conditions vary considerably from day to day based on overall traffic levels and non-recurring events. It is impossible to model the complexity of this system with a regional modeling tool. In addition, regional models cannot capture the nuances that cause congestion – that is, bottlenecks caused by specific geometric considerations or merging/weaving activities. These limitations will restrict the ability of these models to forecast actual traffic flows since the regional models will assume particular toll rates at particular times of day and address conditions on an average weekday.

Task 3 – Traffic Analysis for the Near-, Mid-, and Long-Term

The following work steps will be carried out:

- **Limitations Analysis –** Prepare a technical memorandum that explores the limitations and uses of traffic analysis. We propose to combine this analysis with that from Task 4, which explores the limitations of fiscal analysis, since these are closely related. There are limits to traffic analysis; CS has been investigating these. We will compile the lessons learned from toll and pricing studies around the country and relate them to the Commission's and WSDOT's evaluation and decision needs. We also will provide insight into the advantages of the CRA/PSRC modeling tool (e.g., sensitivity of the time of day and assignment models to congestion, cost, and income), as well as the disadvantages (e.g., choice to use a toll facility is sensitive to cost and income, but not other demographic factors).

- **Refine Traffic Analysis and Modeling Tools –** CS and Mirai will continue to work with WSDOT staff to test and refine the modeling tools. We will take advantage of parallel modeling work for the CRA Phase II, where pricing scenarios are being tested using this new modeling tool by coordinating the scenarios and pricing structures to serve both projects more effectively. Our work scope assumes that the modeling year will be 2030, and that a working baseline 2030 model will be provided by WSDOT for our use on this study. This will be the same baseline model anticipated to be used for the CRA Phase II study.

  We also will develop methods to transfer the behavioral characteristics of responses to pricing studies from the CRA/PSRC model output to the other urban regions in the state. Should projects be proposed outside of PSRC and Vancouver areas, we will develop appropriate techniques using available data to develop a reasonable analysis. We may draw upon some of the screening tools developed in Task 2 to accomplish this.

- **Confirm Baseline Assumptions –** All transportation analysis relies heavily on assumptions. We will work with WSDOT staff to confirm all baseline assumptions and make sure that these assumptions are correctly represented in the relevant models.

- **Develop Performance Benchmarks –** Based on the work in Tasks 1 and 2, we will translate PSRC's policy goals into performance benchmarks that can be used to communicate the effectiveness of projects or systems of projects. We anticipate that these benchmarks will be consistent with those now being developed for the CRA project.

This work will be completed for use at the October Commission Workshop.

Task 4 – Fiscal Analysis for the Near-, Mid-, and Long-Term

This task has two parts. The first involves developing the methodologies used to do fiscal analysis. The second will involve the actual fiscal analysis once the travel modeling work from Tasks 5 and 6 is complete. The fiscal analysis will involve estimating project costs, calculating project revenue streams from the traffic analysis, and considering potential finance mechanisms. These specific work elements will be done:

- **Limitations Analysis –** Before carrying out any of these analyses, the team will explore the limitations of fiscal analysis in the context of user-fee revenue sources. This will consider the uncertainties not related to traffic and revenue (covered in Task 3) such as cost issues related to new technologies, risk factors related to implementation schedules, and ultimately, the relationship among all the factors that lead to successful versus troubled toll projects.

- **Cost Estimates of Candidate Projects –** PBS&J will develop procedures for developing study cost estimates from available sources of information. This will involve quantifying the scope of each toll project identified in the study and then using available information to develop cost estimates. Available information may include previous cost estimates performed by WSDOT or other consultants, or in cases where no previous work is done, using estimates based on unit prices on similar projects elsewhere. In doing this analysis, PBS&J will apply risk factors that could impact the cost estimates. No new cost estimating is expected, but PBS&J will review all cost estimates for reasonableness, since costs are as much a driver of fiscal success as revenue.

  Many of the projects may involve unique elements related to geometric design and toll collection equipment. PBS&J has been closely tracking industry cost trends and utilizes this cost information to develop estimates for cost studies throughout the Nation. Elements of the analysis related to toll technology in Task 7 also will be folded into this work. The cost estimates for the project will be finalized in a program that can be easily updated to reflect any changes in the scope of the study, such as adding or removing a project, moving projects from near-term to long-term, or adding additional toll locations.

- **Revenue Estimates of Candidate Projects –** Revenue is simply traffic times the toll rate. In this age of variable pricing, revenue calculation has become more complicated, and various factors have to be considered, but this is still a straightforward exercise. One of the more important elements in assessing toll feasibility is the anticipated flow of funds over the years. Traffic and revenue potential in the early years is far more important from the standpoint of potential investors (e.g., bondholders) than revenue in later years that may or may not materialize. Our team will develop an approach to representing the revenue potential of projects that is appropriate to each situation, yet consistent between projects for fairness.

- **Finance Mechanisms and Fiscal Evaluation –** The word "feasibility" analysis is often used in conjunction with tolling studies. However, it is more and more difficult for single projects, or even a portfolio of projects, to be fully self-supporting. In this task, we will explore traditional feasibility measures such as bonding capacity. We will then consider mechanisms that other states have used to incubate and launch successful tolling programs. PBS&J is involved with agencies in Florida, Texas, and North Carolina, all of which provide valuable lessons for putting together both an administrative structure (covered in Task 11) and a financial structure. Ultimately, the fiscal evaluation will be structured to meet the policy objectives identified in Task 1.

The limitations analysis for the fiscal analysis will be combined with the limitations analysis from Task 3 for a deliverable in time for the October Commission workshop. The remainder of the fiscal analysis will occur together with the modeling and traffic analysis of individual projects over the course of the study.

Task 5 – Interim Modeling and Analysis

The interim modeling and analysis task will focus on a subset of those that emerged as "illustrative examples" in Task 2. We anticipate that 5 - 6 illustrative scenarios (in addition to scenarios that may be

studied as part of the Congestion Relief Analysis II) will be studied. The number of examples that are possible will depend on the complexity of each example (i.e. we can produce more examples of less complex scenarios). Specific work elements will be:

- **Evaluate Candidate Toll Facilities –** Our team will apply the modeling tools developed for the CRA study to evaluate specific candidate toll facilities. We will provide estimates of traffic, revenue, and fiscal considerations for each. We will test the impacts of various toll structures on traffic and revenue estimates. At a minimum, this analysis will include the Alaskan Way Viaduct, I-405, SR-520, and SR 704 Cross Base facilities. We will coordinate closely with the CRA Phase II forecasts of HOT lane scenarios being prepared by Mirai and CS during the same timeframe. These scenarios will include a mixture of HOV lane conversions and multiple lane HOT facilities with added lanes. A full roadway congestion pricing scenario also will be examined.
- **Evaluate Candidate Toll Systems –** The CRA/PSRC modeling tools will be used to evaluate the candidate toll systems. Again, we will coordinate with the CRA Phase II work, since several of these candidate toll systems are being tested as part of this work.
- **Illustrate Impacts of Tolls on Traffic and Revenue –** This task will focus on preparing high-level graphics and data summaries to convey the results of the traffic and revenue studies for specific projects, as well as to draw conclusions on the relationships between toll levels and revenues for different pricing mechanisms. The analysis of the various candidate toll facilities and systems will focus on determining the potential for value pricing to generate revenue, maximize the efficient operation of the system, and provide economic indicators for future investments.

Task 6 – Final Modeling and Analysis

This task would occur after the Interim deliverable and would repeat the analyses done in Task 5 for additional corridors and systems of corridors not covered in the illustrative examples completed in Task 5. The same work elements would be undertaken. We have assumed analysis of a total of up to 11 scenarios (in addition to scenarios that may be studied as part of the Congestion Relief Analysis II) between Tasks 5 and 6. If some scenarios are simpler to run than anticipated, we could accommodate additional scenarios.

Tasks 7-11 – Implementation Issues

Task 7 – Technology Analysis for the Near-, Mid-, and Long-Term

The objective of this task is to provide a clear vision and potential migration path for Washington State's tolling systems, standards, technologies, and supporting systems. The toll industry is in a constant state of evolution, so it is sensible for the Commission and WSDOT to develop a long-term strategy that takes advantage of the latest appropriate technology while retaining flexibility for future enhancements. Emerging and competing toll industry standards, such as new Dedicated Short-Range Communication (DSRC) standard and global positioning system (GPS)/GSM approaches, will impact the technology migration path and methods of operations for existing and future toll systems. Furthermore, compatibility within the State among various toll projects and between neighboring states both in terms of technologies and account/revenue management is crucial to seamless operations, particularly in providing customer service. Pricing structures that support HOT lane dynamic pricing and roadway charging also raise important operational and enforcement issues.

The project team will prepare a technology and customer service analysis that covers near, mid, and long-term timeframes. This analysis will be more than a simple review of existing and emerging technologies, systems (both payment and violations processing), and operations. It will account for the specific findings and facility type selections from Tasks 1 and 2. The assessment for this task will consider four aspects of tolling:

1. **Facility Types –** Different types of facilities that may be potentially deployed will be identified and categorized;
2. **Methods of Operations –** Likely methods of operations will be identified given the facilities identified for potential toll operations in terms of payment modes and enforcement methods;
3. **Operational and Technical Issues –** Distinctions between operations and technical issues will be identified for the various facility types and methods of operations; and
4. **Technologies –** Existing and future technologies will be classified and described in terms of their applicability to operations of the various toll facility types.

In order to sort out the existing and emerging technologies in light of these four aspects, a matrix will be developed providing descriptions, current development status, pros, cons, and operational considerations for each technology grouped by function. Functional breakdowns will include toll collection (on-board devices and roadside equipment), enforcement, facility management, financial, customer service, violation processing, cost accounting, and other back-office functionality. The matrix will include ranges of costs, as well as planning estimates of overall system cost for various complete toll system solutions.

One of the most crucial issues to be addressed by the technology assessment will be how to handle and integrate a potentially wide array of toll facility types with varied operations. Open-road and managed lanes toll facilities have distinct needs when compared with traditional toll operations. The matrix will allow this issue to be sorted out clearly in terms of the most applicable technologies. For those technologies and options displaying the most promise in terms of Washington State's needs for the near and long-term, alternative customer experience scenarios and toll system architectures will be developed. These will describe from a toll customer's perspective how the technology options impact the usefulness and seamlessness of the statewide toll operations.

The technology assessment will include specific examples of toll operations and the use of different technologies, as well as current discussions on emerging standards. Finally, policy implications and considerations will be addressed by type of toll operations including privacy, enforcement, legal, and equity policies.

The work under this task will be packaged in the following deliverables:

- Working paper on technology issues for presentation at the October Commission Workshop. The focus of this will be to outline the issues and trends in the industry as they relate to the Washington State.
- Graphics will be prepared to provide a clear overview of the technology alternatives.
- Based on feedback received at the October Commission Workshop, further develop the issues into potential technology development strategies. Prepare a technical memorandum to contribute to the Interim Report.
- Respond to feedback to the Interim Report to refine the technology options for the Final Report.

Task 8 – Assessment of Social and Environmental Impacts

This task will assess the geographic, demographic, and socioeconomic equity, and user fairness issues associated with the candidate toll facilities and suggest mitigating measures if necessary. Unlike other issues (such as privacy, reliability of pricing, and engineering), fairness and equity in toll facilities are issues that are still cited as often today as 20 years ago. Left unanswered, these concerns can constitute an insurmountable barrier to implementation. Equity and fairness are terms cited interchangeably with one another. However, these concepts are inherently different. Equity issues must be resolved in the planning and environmental processes; fairness issues are inherent within policy and individual choice. The challenge is to provide the Commission with policy choices addressing fairness and mitigation suggestions for equity concerns, while recog-

nizing that apparent equity impacts from tolling may still yield positive overall economic health for affected populations.

Specific work elements of this task are:

- Identify an analytical framework to separate fairness (matters of choice) from equity (matters of capability and accessibility);
- Prepare case-study analyses of national peer projects, identifying lessons learned, best practices, and critical flaws;
- Develop two matrices of potential equity and fairness impacts, including the generalized categories of:
    - Geographic and socio-demographic allocation of transportation resources;
    - User class penalty and reward for use of identified modal alternatives;
    - Differential willingness and perceived ability to pay;
    - Differential capability to pay;
    - Differential accessibility to candidate toll facilities; and
    - Distribution of benefits.
- Evaluate the candidate toll corridors, through the following activities:
    - Develop methodology for analyzing each candidate toll facility within the context of the matrices' criteria;
    - Collect data from regional, state, and national sources;
    - Evaluate issues of fairness and equity within a qualitative framework for various socio-economic profiles and modal user classes; and
    - Identify critical flaws and areas of concern for each corridor.
    - Suggest mitigation strategies and identify impacts to public acceptance.
- Provide an analysis template that the Commission and WSDOT could use for future projects.

The first three major items will be prepared in time for the October Commission meeting. The remaining items will follow along the same schedule as analysis of corridors and systems of corridors in Tasks 4, 5, and 6.

Task 9 – Legal and Regulatory Issues

The legal analysis will identify legal problems and propose specific solutions relating to broadened tolling on transportation facilities in the state. These issues (many of which have been previously identified by WSDOT and the Office of the Attorney General) include: adequate statutory authority for imposition of tolls; legal parameters constraining rate setting; collection and enforcement issues; equal protection, due process and interstate commerce issues relating to toll setting and enforcement; state and Federal privacy concerns; legal limits on the use of toll revenues; Federal transportation law overlay; State Environmental Policy Act (SEPA) and National Environmental Policy Act (NEPA) requirements related to air quality and other environmental impacts; interplay with the Growth Management Act; and needed adjustments to statutes governing local and regional entities [such as regional transportation investment districts (RTID). We will identify and research the full range of potential issues and propose specific solutions to each of the potential problems that have been identified.

The product of this work will be a technical memorandum that will contribute to the Interim Report. We anticipate this work being focused on the period between the October Commission Workshop and the Interim report.

Task 10 – Communications and Public Attitudes

Success in communications for this tolling initiative requires a team of specialists, a plan, proper framing, and a toolbox that is appropriate to the needs of the project. TTI has already done research into effective communication approaches for pricing projects around the country, and FW&A is the marketing and public affairs consultant for Tacoma Narrows Bridge and toll authorities and private toll developers around the nation.

Task 10.1 – Literature Search and Analysis

TTI will lead the literature search and analysis (Task 10.1). Much of this work is already in hand, but will need to be updated based on recent developments. They will prepare a technical memorandum summarizing the results within the context of Washington State's program.

Task 10.2 – Plan for Assessing Public Attitudes

The research plan will recommend a set of research objectives and methodologies that can provide actionable information for future decisions. In our experience, there are primary and secondary issues surrounding these projects. It is clear from the State's prior experience and from knowledge gained recently on the Tacoma Narrows Bridge project and more recently on the SR 167 project, that these issues are present to one degree or another in Washington today. Some of the primary issues that typically come up in tolling efforts reflect people's primary beliefs and values systems. Key issues include: social justice and equity, environment, privacy, and the implications of privatization. Secondary issues include access plans, price/cost to build, nonstop tolling, schedule, and construction impacts.

The research plan will be designed to:

- Meet specific policy, conceptual, design, operational, pricing feasibility, geographic and public acceptance concerns identified by the Commission, WSDOT project managers and the study team;
- Include methodologies (e.g., focus groups, surveys, executive interviews) to obtain both quantitative and qualitative data that is supportable;
- Provide data that identifies and quantifies opinions, attitudes and values held by respondents concerning the key issues that surround this initiative and individual projects;
- Provide data and information that supports the objectives of the study and is actionable; and
- Be economical.

The research plan will be presented in a technical memorandum scheduled to occur sometime in the January – March 2006 time frame, or later, as directed by WSDOT staff.

Task 10.3 – Plan for Communicating Results of This Study

We will develop and implement a plan to communicate the results of the study. Studies and projects like this go through a public and communications life cycle and each phase has different strategic, tactical, and messaging needs. The following key points should be considered:

- Background information on the state of the transportation system.
- The "study" nature of the project should be emphasized.
- Framing and messaging for the study, key briefings and identification, and endorsement by champions needs to occur early in the process.
- Communications should focus on the thoughtful and quiet introduction of the concept with key stakeholders, opinion leaders, and media.

The study's major milestones provide an appropriate scheduling focus for implementing the communications plan. Most important, we understand that the Commission, with the support of WSDOT will control the message and oversee relations and what is released to the news media. We will:

- Identify specific audiences and develop a communications plan.
- Prepare major milestone press kits including the following: cover release, fact sheet, "white paper", and presentation materials.
- Work with the Commission and WSDOT to create and update a Tolling Study web page and e-mail distribution system.

We will work closely with the Commission and WSDOT staff to tailor the communication strategy that best meets the study's needs. For budgetary purposes, we have assumed that updated communications tools will be needed four times over the course of the study.

Task 11 – Organizational and Administrative Arrangements

The objective of this task is to identify and suggest potential organizational models that meet Washington State's needs. Organizational options might include:

- **Statewide –** Many examples exist, including the Florida Turnpike Enterprise. These agencies also can exist in combination with others.
- **Regional –** These are common in many of states, including Florida and Texas.
- **Project-Specific –**They represent a "standalone" approach to toll projects.
- **Private Sector Partnerships –** They are represented by today's public-private partnerships.

The team will provide an assessment of these organizational approaches, the service they provide, and their potential applicability within the Washington transportation community. In the Washington case, we will pay particular attention to the need to coordinate work efforts related to various corridors, selected procurement processes, and financial plans. We also will look at the toll organization's relationship to WSDOT and the Transportation Commission, addressing issues such as outsourcing, budgeting, administrative responsibilities, and jurisdictional boundaries.

The scheduling of this task will be as follows:

- Prepare a working paper suitable for discussion and presentation at the October Commission Workshop focusing on organizational structures around the country.
- Prepare a Technical Memorandum on applicability of organizational structures to Washington to contribute to the Interim Report
- Refine work based on progress of policy discussions for the Final Report.

Management, Documentation and Presentations

Task 13: Management and Coordination

This will be a fast-paced, multi-faceted study with the need for extensive interaction among CS, its consultant team, WSDOT project staff for this project and other ongoing efforts, Commission staff, and others. This task outlines the level of effort assumed for this work:

- Kickoff meeting with WSDOT staff the week of September 6
- Prepare a final work plan and schedule
- Prepare a project management plan for consultant project management use
- Prepare bi-weekly progress reports (18 reports) 24 hours in advance of the bi-weekly teleconference, containing:

  - A summary of any preliminary findings or issues of significance.
  - Risks or issues that might affect the schedule or level of effort as planned, and their required resolution time frames.
  - Progress against planned tasks and activities for the particular reporting period.
  - The specific accomplishments achieved during the reporting period, including a listing of persons contacted or interviewed and documents reviewed.
  - Planned tasks and activities for the next reporting period, including anticipated contacts and research plans.
  - Disposition of previously reported risks or issues.
  - Proposed revisions to the workplan, specifically noting any suggested changes in schedule or assumptions.

- Facilitation of bi-weekly teleconference coordination meetings with the Commission Subcommittee and Department staff (18 conferences). This will involve preparation and distribution of the agenda and background materials, leading the meeting, and preparing/distributing action-oriented minutes. Teleconference will be supported by WSDOT.
- Periodic meetings and phone discussions with WSDOT and Commission lead staff. The level of coordination during the first 2-3 months of the study is expected to be considerable. We have assumed that the CS project manager would be based in Seattle for extended periods during this time frame. CS would prepare action-oriented summaries of any decisions reached at these meetings.
- Quality assurance/quality control review of assumptions, findings, and products.

Task 14: Documentation and Presentations

This task involves synthesizing the results of the individual work tasks into a coherent report suitable for a non-technical, policy-oriented audience. Three reports are assumed:

1. Initial Assessment (Draft on October 3, 2005, Final on October 28, 2005)
2. Interim Report (Draft on December 1, 2005, final on January 3, 2006)
3. Final Report (Draft on June 30, 2006, final on July 30, 2006)

This task also includes presentations of findings over the course of the study, as follows:

- Facilitate workshops and policy discussions with the full Commission at these milestones:
  - September
  - October
  - December
  - July
- Presentations to the legislature during the 2006 legislative sessions. Two, 2-day appearances have been assumed.
- Three presentations of the final report to occur during one trip to Washington.

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